

**REMARKS**

Claims 1 and 5-22 are pending in this application. Claims 16 and 18 remain withdrawn from consideration and claims 1-15 and 17 are currently being examined. By this Amendment, claims 2-4 are canceled, claims 1, 11, and 16-18 are amended, and claims 19-22 are added. No new matter is added.

**I. Claim Amendments and New Claims**

Support for the amendments to claims 1 and 16-18 can be found at least in original claim 4 and in Example 3 at p. 42 of the instant specification. Support for the amendment to claim 11 can be found in the instant specification at p. 16, lines 5-6. Support for new claims 19-22 can be found at least in Example 3 at p. 42 of the instant specification.

**II. Restriction Requirement**

Applicants affirm election of Group I, claims 1, 5-15 and 17, with traverse. Furthermore, Applicants assert that at least newly-added claims 19 and 21, which depend from claims 1 and 17, respectively, should be examined with the claims of Group I. However, for the reasons discussed below, all of claims 1 and 5-22 should be examined together.

At least because claims 16 and 18 (and newly-added claims 20 and 22) contain all of the features of claim 1, it is respectfully submitted that the subject matter of all pending claims is sufficiently related that a thorough search for the subject matter of any one Group of claims would encompass a search for the subject matter of the remaining claims. Thus, it is respectfully submitted that the search and examination of the entire application could be made without serious burden. See MPEP §803 in which it is stated that "if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions" (emphasis added). It is respectfully submitted that this policy should apply in the present

application in order to avoid unnecessary delay and expense to Applicants and duplicative examination by the Patent Office.

Thus, withdrawal of the Restriction Requirement is respectfully requested.

**III. Drawings Objection**

The Office Action objects to the drawings. Specifically, the Office Action argues that the drawings fail to comply with 37 CFR §1.84(p)(5) because reference character 12 in Fig. 2 is allegedly not described in the specification. Applicants respectfully traverse the objection.

37 CFR §1.84(p)(5) states that: "Reference characters not mentioned in the description shall not appear in the drawings. Reference characters mentioned in the description must appear in the drawings." However, 37 CFR §1.84(p)(5) does not place any restrictions on where in the description the reference characters are described. Thus, mention of an illustrated reference character anywhere in the description satisfies the requirements of 37 CFR §1.84(p)(5).

As acknowledged in the Office Action, Resin 12 -- which is identical in Figs. 1 and 2 -- is described in the instant specification at p. 29. Thus, the drawings satisfy the requirements of 37 CFR §1.84(p)(5). Reconsideration and withdrawal of the objection are respectfully requested.

**IV. Specification Objection**

The Office Action objects to the specification for various informalities. By this Amendment, the specification is amended as suggested by the Office Action. Reconsideration and withdrawal of the objection are respectfully requested.

**V. §102 Rejection Over US 485**

The Office Action rejects claims 1-15 under 35 U.S.C. §102(b) as being anticipated by US 485 (U.S. Patent No. 6,287,485 to Akashi et al.).

By this Amendment, claims 2-4 are canceled, rendering the rejection of these claims moot.

Claim 1 is directed to a polymer gel composition comprising swelling liquid and a polymer gel that includes a crosslinked polymer having at least a hydrogen bonding group, and recites:

"... wherein the crosslinked polymer included in the polymer gel is a copolymer of at least two monomer components including:

(meth)acrylamide or a mono-substituted derivative thereof as a monomer component (A), wherein the monomer component (A) is a mono-substituted derivative of an alkyl(meth)acrylamide; and

a monomer different from the monomer component (A) as a monomer component (B), wherein the monomer component (B) is selected from the group consisting of a mono-substituted (meth)acrylamide, a di-substituted (meth)acrylamide, a (meth)acrylate derivative and a vinyl type monomer."

US 485 fails to teach the claimed cross-linked polymer of claim 1.

US 485 discloses a polymer gel that includes copolymers of (meth)acrylamide cross-linked with (meth)acrylic acid, vinyl sulfonic acid, vinyl benzenesulfonic acid, and dimethylaminopropyl(meth)acrylamide. See col. 5, line 52 to col. 6, line 26. US 485 further discloses that the heat-responsive polymer gel preferably includes a cross-linked polymer having two components linked to each other by hydrogen bonding, such as cross-linked poly(meth)acrylamide and cross-linked poly(meth)acrylic acid. See col. 7, lines 1-27.

However, US 485 fails to teach a polymer gel composition comprising a copolymer of at least two monomer components including a mono-substituted derivative of an alkyl(meth)acrylamide as a monomer component (A), and a member selected from the group consisting of a mono-substituted (meth)acrylamide, a di-substituted (meth)acrylamide, a (meth)acrylate derivative and a vinyl type monomer as a monomer component (B), as required by claim 1. Thus, US 485 fails to teach every feature of claim 1.

For at least these reasons, US 485 does not anticipate claim 1. Claims 5-15 depend from claim 1 and include all of its features. Accordingly, US 485 does not anticipate these dependent claims for at least the same reasons as claim 1. Reconsideration and withdrawal of the rejection are respectfully requested.

**VI. §102(b) Rejection Over US 119**

The Office Action rejects claims 1-5, 11, 12, and 17 under 35 U.S.C. §102(b) as being anticipated by US 119 (U.S. Patent No. 4,891,119 to Ogawa et al.).

As discussed above, claims 2-4 are canceled, rendering the rejection of these claims moot.

Claim 1 is discussed above. Claim 17 is directed to a resin composition comprising a polymer gel composition comprising swelling liquid and a polymer gel that includes a crosslinked polymer having at least a hydrogen bonding group, and recites:

"... wherein the crosslinked polymer included in the polymer gel is a copolymer of at least two monomer components including:

(meth)acrylamide or a mono-substituted derivative thereof as a monomer component (A), wherein the monomer component (A) is a mono-substituted derivative of an alkyl(meth)acrylamide; and

a monomer different from the monomer component (A) as a monomer component (B), wherein the monomer component (B) is selected from the group consisting of a mono-substituted (meth)acrylamide, a di-substituted (meth)acrylamide, a (meth)acrylate derivative and a vinyl type monomer."

US 119 fails to teach the claimed cross-linked polymer of independent claims 1 and 17.

US 119 discloses a gel medium for electrophoresis formed by cross-linking monomers, such as N-methylacrylamide, N,N-dimethylacrylamide, and N-(hydroxymethyl)acrylamide in aqueous medium. See col. 2, lines 63-68, and col. 4, lines 48-53.

However, US 119 fails to teach a polymer gel composition comprising a copolymer of at least two monomer components including a mono-substituted derivative of an alkyl(meth)acrylamide as a monomer component (A), and a member selected from the group consisting of a mono-substituted (meth)acrylamide, a di-substituted (meth)acrylamide, a (meth)acrylate derivative and a vinyl type monomer as a monomer component (B), as required by claim 1. Thus, US 119 fails to teach every feature of claims 1 and 17.

For at least these reasons, US 119 does not anticipate claims 1 and 17. Claims 5, 11, and 12 depend from claim 1 and include all of its features. Accordingly, US 119 does not anticipate these dependent claims for at least the same reasons as claim 1.

Reconsideration and withdrawal of the rejection are respectfully requested.

#### **VII. §102(b) Rejection Over US 12934**

The Office Action rejects claims 1-3, 7, 8, 14, and 15 under 35 U.S.C. §102(e) as being anticipated by US 934 (U.S. Patent Application Publication No. 2003/0012934 to Kawahara et al.).

As discussed above, claims 2 and 3 are canceled, rendering the rejection of these claims moot.

Claim 1 is discussed above. US 934 fails to teach the claimed cross-linked polymer of claim 1.

US 934 discloses ionic polymer gels that may include copolymers of (meth)acrylamide with (meth)acrylic acid, poly-vinylsulfonic acid, or vinylbenzene sulfonic acid. See paragraph [0039]. However, US 934 fails to teach a polymer gel composition comprising a copolymer of at least two monomer components including a mono-substituted derivative of an alkyl(meth)acrylamide as a monomer component (A), and a member selected from the group consisting of a mono-substituted (meth)acrylamide, a di-substituted

(meth)acrylamide, a (meth)acrylate derivative and a vinyl type monomer as a monomer component (B), as required by claim 1. Thus, US 485 fails to teach every feature of claim 1.

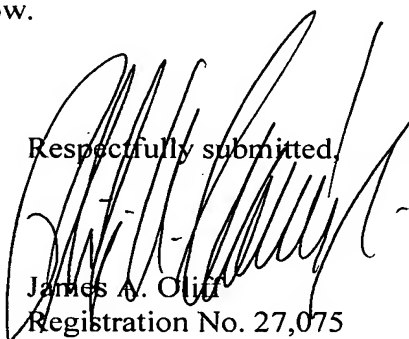
For at least these reasons, US 934 does not anticipate claim 1. Claims 7, 8, 14, and 15 depend from claim 1 and include all of its features. Accordingly, US 934 does not anticipate these dependent claims for at least the same reasons as claim 1. Reconsideration and withdrawal of the rejection are respectfully requested.

#### **VIII. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1 and 5-22 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

  
James A. Oliff  
Registration No. 27,075

Philip A. Caramanica, Jr.  
Registration No. 51,528

JAO:PAC

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**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

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